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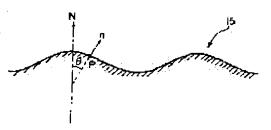
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## (54) REFLECTIVE-TYPE LIGHT EMITTING DIODE AND LIGHT EMITTING DIODE ARRAY

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a reflective-type light emission diode and a light emission diode array, wherein the light emission diode is possessed of a uniform radiation pattern and uniform in light distribution characteristics even if a distance between a radiating plane and an irradiating plane is intermediate, and the light emission diode array seems to emit light rays from all its radiating plane when it is used as a display.

SOLUTION: An emission surface 15 looks line a smooth plane when it is macroscopically observed but looks like a rugged plane where a large number of fine irregularities are arranged at random when it is microscopically observed. Provided that a point on the rugged surface 15 is represented by P, the normal n of the rugged surface 15 at the point P makes an angle hetawith the normal N of the emission surface 15, and the irregularities are formed so as to make an angle  $\, heta\,$  smaller than an angle of 30° or so at all points P on the radiation surface. A nearly parallel light flux reflected from a concave reflective surface is refracted when it passes through the emission surface 15 and radiated in a random direction a few degrees or less off the normal N.



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